U.S. Department of Energy

Laboratory Directed Research and Development (LDRD)/ Plant
Directed Research, Development and Demonstration (PDRD)/ Site Directed
Research, Development and Demonstration (SDRD)
Reporting System

Fiscal Year 2006 Guidance

Table of Contents

| Background | | | |
|---|---|----------------------------|-------------|
| Type of System | | | |
| Overview of the L-P-SDRD Reporting System | | | |
| Co Fie | ne L-P-SDRD Reporting System ontractor Requirements eld Requirements eadquarters Requirements | 4 4 4 | |
| Data Entry Field Chie View Only OSTI Extra | f Financial Officer | 5 5 5 6 6 6 | |
| Timeline for L-P-SDRD Report Generation | | 6 | |
| Project Information | n Data Entry | 6 | |
| Site-Wide Financial Information Data Entry | | | , |
| LDRD/PDRD/SDF | RD Administrative Costs Data Entry | 8 | |
| Field Chief Financ | ial Officer Certification | 8 | |
| Rollover of FY 2005 Project Information | | | , |
| Other Report Information | | 8 | |
| | | | |
| Attachment A Attachment B Attachment C | LDRD Reporting Laboratories PDRD/SDRD Reporting Sites Certifying Offices | 1 | 0 1 2 |

Background: The Office of the Chief Financial Officer (CFO) developed the Laboratory Directed Research and Development (LDRD)/Plant Directed Research, Development and Demonstration (PDRD)/Site Directed Research, Development and Demonstration (SDRD) Reporting System to satisfy the requirements of the FY 2001 Energy and Water Development Conference Report which calls for an annual report on LDRD/PDRD/SDRD expenditures from the Department's Chief Financial Officer. Furthermore, this system will serve as support for the Secretary's assertion required in the FY 2002 Energy and Water Development Conference Report on accepting monies from other federal agencies and utilizing a portion of the money to perform LDRD. The system collects project information on approximately 1700 individual LDRD/PDRD/SDRD projects and provides standard reports. Finally, the system provides input to the Office of Scientific Technical Information (OSTI) and eliminates the requirement for locations to input duplicate LDRD data in that database.

Type of System: The system is a web-based, state of the art electronic system that provides: access by all DOE federal and contractor employees requiring hands on access to the system; access via common browsers at local workstations; a mechanism for data entry users to indicate data is ready for review by proper authority; data lock-down on a site basis prior to site certification by Field Office; an automated, paperless method for presenting summary data to certifying officials; electronic signatures in the form of userID/password or unlock feature to correct changes; a method for Headquarters to distinguish any data that has not been certified; support access rules for different users; and appropriate security to protect data integrity, prevent unauthorized access, and marking and handling privacy data according to federal regulations during storage and transmission.

Overview of the L-P-SDRD Reporting System: The system has a) data entry screens to accept administrative, cost and text descriptions for each project; and b) certification entry screens for the Field CFOs. The system also has the capability to accept XML files generated from sites' local LDRD systems as a first step to enter data. The system also supports individual project reporting at the local entry site and summary reports, if required, at the Field Office site.

It is envisioned that data entry will be performed at the laboratory, plant or site by several individuals or through the XML file upload capability, with interactive data entry for finalization. Field Chief Financial Officers or their appointed representatives will review summary data by location and certify the accuracy of the financial data. Program Offices at Headquarters will have View Only capability to review the data and the ad hoc reporting capability once the data has been published and forwarded to Congress.

The system can be accessed at https://ldrdrpt.doe.gov. Entry to the system requires a UserID and password; however potential users and interested parties may obtain background and technical information at the logon screen via the hyperlinks located at the bottom of the page.

Finally, the system will provide a data extract to the Office of Scientific Technical Information. This information will be provided by site to OSTI after the data has been published and issued to Congress.

Requirements of the L-P-SDRD Reporting System: The L-P-SDRD Reporting System requires input from sixteen of the Department's laboratories, weapons production plants, sites and operations offices. The Office of the Chief Financial Officer with the assistance of applicable Headquarters program offices is responsible for ensuring the final report meets Congressional requirements.

Contractor Requirements: Contractor employees at each of the eleven National laboratories listed in Attachment A will enter project information for each LDRD project conducted during the fiscal year. Contractor employees at each of the weapons production plants and test site listed in Attachment B will enter detailed project information for each PDRD/SDRD project conducted during the fiscal year. Contractor employees will also input site-wide financial information for their laboratory, weapons production plant or site. This information will be used to calculate the mandated thresholds for LDRD/PDRD/SDRD. Once all the data has been entered and locked to changes by the laboratory or production site it will be forwarded electronically to the cognizant Field Chief Financial Officer for review and certification. All detailed project information must be input by October 31.

Field Requirements: The Field CFO will review the summary information for each site under their cognizance and certify that the data is accurate and reliable and ensure all applicable policies and procedures were adhered to during the fiscal year. Certification of this site's (lab/plant/site) information includes an affirmation that aggregate costs reported by the system are in agreement with the site's (lab/plant/site) financial records, the method for accumulating funds is consistent with DOE Order 413.2A or other applicable Departmental guidance and that Departmental requirements concerning LDRD charges on other Federal agency funded work for other projects have been adhered to, if applicable. Attachment C includes a listing of the operations offices and the laboratories and/or weapons production plants under their cognizance. This certification will also serve to support the Secretary's required assertion that all other federal agencies were notified LDRD charges would be included in Work For Others agreement charges. For LDRD information, Field CFOs should utilize information obtained during the DOE Order 413.2A, "Laboratory Directed Research and Development, mandated review. However, Field CFOs may perform additional review and analysis deemed appropriate. Certified sites will be available electronically for reporting and analysis at Headquarters. All sites must be certified by November 15.

Headquarters Requirements: CFO staff will consolidate all data and prepare the final Congressional report by the mandated deadline of December 29. CFO will also serve as system administrator for the L-P-SDRD Reporting System. Headquarters program offices will assist CFO as necessary to ensure the Congressional report includes all the required information.

<u>User Groups:</u> There are six User Groups within the L-P-SDRD Reporting System: Data Entry, Senior Site Representative, Field CFO, View Only, OSTI Extract and System Administrator. The functions and responsibilities of each User Group are different and discussed below.

Senior Site Representative: There will be one individual at each laboratory or site who will assume a senior data entry role. In addition to the data entry role discussed below, the Senior Site Representative will be responsible for (1) approving all data entry users at their site for system access; (2) entering the site-wide financial information used to calculate the mandated thresholds and administrative costs related to the program; and, (3) locking the

entire site when all the detailed project and funding information has been entered and is ready for certification by the Field Chief Financial Officer.

Data Entry: At each laboratory or production site with LDRD/PDRD/SDRD projects there will be one or more persons responsible for entering the detailed project information into the system. These individuals will have the capability to interactively enter the data into the system or upload the information via a XML file from their local system. Detailed XML Upload specifications are located at the system logon screen. These users will only see information on projects related to their site. Once the data entry user has entered all the information for a project and is confident that the information is correct the user will finalize the project. The system will keep a running tally of total projects at each site and finalized projects at each site as information for the Senior Site Representative to use prior to locking the site for certification. Projects do not have to be marked as final in order to lock the site. The finalization tool is merely to keep record of projects considered complete throughout the data entry process.

Field Chief Financial Officer: The Field Chief Financial Officer or their designee will be responsible for reviewing the summary information (project and site-wide) provided by laboratory or production site and certifying that the data is accurate and reliable. Certification of this site's (lab/plant/site) information includes an affirmation that aggregate costs reported by the system are in agreement with the site's (lab/plant/site) financial records, the method for accumulating funds is consistent with DOE Order 413.2A or other applicable Departmental guidance and that Departmental requirements concerning LDRD charges on other Federal agency funded work for other projects have been adhered to, if applicable. Field Chief Financial Officers will have the ability to view detailed project information for all sites under their cognizance. If during the review they note errors and/or necessary changes the Field CFO must unlock the site and notify the site's Senior Site Representative. If the site was certified previously that certification becomes void when the site is unlocked and the data must be re-certified. The System Administrator grants access to the system for Field CFOs and their designees. Access to Field CFO designees requires a copy of an acknowledgement that the Field CFO understands the individual may act on his or her behalf regarding certification. The system provides a paper authorization form to be signed by the Field CFO and faxed (301-903-2550) to the Office of Internal Review.

View Only: All individuals interested in the information included in the L-P-SDRD System that do not have data entry or certification roles will be granted View Only access. Viewing capabilities will be limited by their cognizance role. For example, laboratory or production site View Only will be for that specific location, Field Office View Only will be limited to their cognizance as shown in Attachment C and Headquarters View Only will allow viewing of projects at all sites. The System Administrator will grant access to the System.

OSTI Extract: DOE Headquarters staff will perform a data extract of information by site and forward the information to OSTI. The System Administrator will grant access to the system for this user. This function eliminates the need for laboratories and sites to enter duplicative project information into the OSTI R&D Database.

System Administrator: This User will perform an array of utility and administrative functions, including granting access to the system; updating system tables; and publishing project data. The System Administrator will have the capability of "locking" an entire site to

prevent further changes to the site data for reporting and analysis purposes and locking the entire database for final publication. This user will see all project information at every site in the system.

<u>Timeline for LDRD/PDRD Report Generation:</u>

| Date(s) | Activity | Responsible Group |
|------------------|--|----------------------------|
| Sept 11 | Database open | System Managers |
| Sept 11 – Oct 31 | Data Entry by Sites | Labs and Production Plants |
| Nov 1 – 15 | Certification | Field CFOs |
| Nov 16 | Pre-publish lock: data in all sites frozen | System Managers |
| | for HQ pre-publication work | |
| Dec 29 | Post-publish lock: Database locked no | System Managers |
| | later than this date | |
| Jan 2 – 15, 2007 | OSTI feed | DOE HQ |

Project Information Data Entry:

Every project at the site must include the following information or required fields:

Project Name – A Narrative Field generally not more than one sentence in length.

Project Identifier – A discrete alphanumeric character. This identified will remain with the project through completion and will not change from year to year.

Point of Contact – The first and last name of the administrative person who would be able to discuss information concerning this project.

Point of Contact Phone Number – The phone number of the administrative point of contact. **Type of Research** - Choice of one of three agreed upon kinds of research performed. See further description included below.

FY Total Project Cost – All fiscal year costs associated with the project. **Project Start Date** – Month, Day and Year the project began.

The system will also accept the following optional fields:

Description of Project (optional) – A short narrative description of the project in layman's terms.

Expected Project Completion Date (optional) - Month, Date and Year the project expected to end.

The system will allow Users to save a record to the database before it is complete with all the required fields. For either interactive data entry or XML file uploads the data by project must include (1) Project Name, (2) Project Identifier, (3) Type of Research and

(4) Project Start Date to save the first time. To finalize the project all the fields listed above (required) must be present. However, the Senior Site Representative may lock the site regardless of whether all the projects have been finalized.

User Groups adopted the following definitions for the three Types of Research performed under

LDRD/PDRD/SDRD projects.

Basic research is defined as research directed toward increases in knowledge or understanding of the fundamental aspects of phenomena and of observable facts that are in fields of present or potential interest to the laboratories, plants and Federal government.

Applied research is defined as research directed toward gaining knowledge or understanding necessary for determining the means by which a recognized and specific need may be met that has specific mission objectives with respect to either products or processes.

Developmental research is defined as the innovative and systematic use of the knowledge or understanding gained from research directed toward the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes.

If the project continues from a prior fiscal year, the system will calculate a cumulative aggregate cost for continuing projects. This amount will maintained in the system but will not be reported in the annual report to Congress.

Site Wide Financial Information: Contractor Senior Site Representatives will be responsible for entering the information used to calculate the annual percentage of LDRD/PDR/SDRD to determine if the legal limitations have been exceeded. DOE Order 413.2A states the maximum funding level established for LDRD must not exceed 6 percent of the laboratory's total operating budget, included non-DOE funded work, for the year, plus an amount of capital equipment funds not to exceed 6 percent of its total capital equipment budget for the year. Under the Senior Site Representative's Main Menu there is a screen for providing this information. Sites should report end of fiscal year cost information by individual program office as well as non-DOE funded work, if appropriate. The enabling language for the PDRD and SDRD programs states NNSA may authorize PDRD and SDRD activities provided that the amount allocated to the plant or site each fiscal year from amounts available to the Department for such a fiscal year for national security programs is not more than an amount equal to 2 percent of such amount. Therefore, PDRD and SDRD sites should only enter DOE-NNSA amounts. The system will provide a calculator feature on this screen to allow users to calculate additional percentages if they chose to. None of the calculations performed by users will be stored in the database.

<u>LDRD/PDRD/SDRD</u> Administrative Costs Data Entry: Sites should enter administrative costs related to the LDRD/PDRD/SDRD programs but not attributable to specific projects. The Senior Site Representative's Main Menu will include a screen to enter aggregate Administrative Costs for the fiscal year. Summary reports generated by the L-P-SDRD system will identify the program administrative costs separately by site.

<u>Field Chief Financial Officer Certification</u>: Field CFOs will review and certify that the information provided by the Senior Site Representatives is accurate and reliable. Field CFOs should ensure that sites under their cognizance have not exceeded the mandated thresholds for LDRD/PDRD/SDRD. More specifically, Field CFO's will certify that the site's (lab/plant/site) aggregate costs reported by the system are in agreement with the site's (lab/plant/site) financial records, the method for

accumulating funds is consistent with DOE Order 413.2A or other applicable Departmental guidance and that Departmental requirements concerning LDRD charges on other Federal agency funded work for other projects have been adhered to, if applicable.

Rollover of FY 2005 Project Information Sites will have the opportunity to rollover projects continuing from FY 2005. At the Main Menu site users will have the option to choose Project Rollover. At that screen users may select projects that will continue into FY 2006.

Other Report Information Laboratories are required to submit the following information to their cognizant Secretarial Officer by November 15, 2006. While this information is not collected in the system it will be included in the FY 2006 Report to Congress.

Number of postdoctoral researchers supported by LDRD Number of postdoctoral researchers supported by all Laboratory programs Number of dollars provided by Defense programs to LDRD Number of dollars provided by non-Defense programs to LDRD Number of dollars provided by Department of Homeland Security (DHS) programs to LDRD

Sum of fiscal year costs of LDRD projects expected to support Defense programs Sum of fiscal year costs of LDRD projects expected to support non-Defense programs

Sum of fiscal year costs of LDRD projects expected to support DHS programs

If you have any questions concerning the system or the requirements call Richard Heller, Office of Internal Review, CF-1.2, on 301-903-4422 or Carl Rupani, Office of Corporate Information Systems, CF-40, on 301-903-3401.

LDRD Reporting Laboratories

Ames Laboratory
Argonne National Laboratory
Brookhaven National Laboratory
Idaho National Laboratory
Lawrence Berkeley National Laboratory
Lawrence Livermore National Laboratory
Los Alamos National Laboratory
Oak Ridge National Laboratory
Pacific Northwest National Laboratory
Sandia National Laboratory
Savannah River National Laboratory

Laboratories covered by DOE Order 413.2A, "Laboratory Directed Research and Development"

PDRD/SDRD Reporting Sites

Weapons Production Plants Included in FY 2004 Energy and Water Development Appropriation Act (P.L. 108-137) Section 308

Kansas City Plant Y-12 Plant Pantex Plant Savannah River Plant Nevada Test Site

Certifying Operations Offices

NNSA Service Center

Kansas City Plant Lawrence Livermore National Laboratory Los Alamos National Laboratory Nevada Test Site Pantex Plant Sandia National Laboratory

Chicago Operations Office

Ames Laboratory Argonne National Laboratory Brookhaven National Laboratory Lawrence Berkeley National Laboratory

Idaho Operations Office

Idaho National Laboratory

Oak Ridge Operations Office

Oak Ridge National Laboratory Y-12 Plant Pacific Northwest National Laboratory

Savannah River Operations Office

Savannah River Plant Savannah River National Laboratory